

Remarks:

Reconsideration of the application is requested. Claims 3-17 are now in the application. Claims 3-11 and 13 have been amended. Claims 1-2 have been canceled.

In the second paragraph on page 7 of the Office action, the Examiner rejected claims 1-2 as being obvious over Reddi (U.S. 3,296,462) and Liu et al. (U.S. 6,097,061) under 35 U.S.C. § 103(a). Claims 1-2 have been canceled. Therefore, the rejection is now moot.

The Examiner objected to claims 3-17 but indicated that they contained allowable subject matter but objected to them for depending on a rejected base claim. Accordingly, claim 3-11 and 13 have been rewritten as independent claims containing all of the features of their base independent claim and any intervening claims. Claims 12 and 14-17 depend from one of these rewritten (now independent) claims.

In view of the foregoing, reconsideration and allowance of claims 3-17 are solicited. In the event the Examiner should still find any of the claims to be unpatentable, please telephone counsel so that patentable language can be substituted. In the alternative, the entry of the amendment is requested as it is believed to place the application in

better condition for appeal, without requiring extension of the field of search.

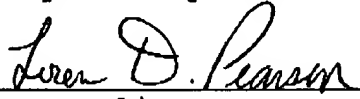
A payment of \$588 to provide for seven excess independent claims is attached.

If an extension of time for this paper is required, petition for extension is herewith made.

Please charge any other fees that might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,

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Version with Markings to Show Changes:In the Claims:

Cancel claims 1-2.

Claim 3 (amended). [The] A semiconductor configuration  
[according to claim 1, wherein:] , comprising:

a semiconductor body including a first connection zone of a  
first conductivity type, a second connection zone of the first  
conductivity type, a channel zone of the first conductivity  
type, at least one control electrode, and an insulation layer;

said channel zone of the first conductivity type being formed  
between said first connection zone and said second connection  
zone;

said insulation layer surrounding said at least one control  
electrode;

said at least one control electrode extending, adjacent to  
said channel zone, from said first connection zone to said  
second connection zone;

said semiconductor body defining a vertical direction and [the  
lateral direction is] a first lateral direction extending from  
said first connection zone to said second connection zone

[said semiconductor body defines] and a second lateral direction transverse to the first lateral direction;

said first connection zone, said second connection zone and said at least one control electrode extending in the vertical direction such that, when a voltage is applied between said first and second connection zones, a current path along the lateral direction is formed in the channel zone;

said at least one control electrode [is] being a substantially plate-shaped control electrode having a respective longitudinal extent in the vertical direction and in the first lateral direction and a lateral extent in the second lateral direction; and

said respective longitudinal extent [is] being greater than said lateral extent.

Claim 4 (amended). [The] A semiconductor configuration [according to claim 1, wherein] , comprising:

a semiconductor body including a first connection zone of a first conductivity type, a second connection zone of the first conductivity type, a channel zone of the first conductivity type, at least one control electrode, and an insulation layer,  
said first connection zone [has] having a first zone with a

first dopant concentration and a second zone with a second dopant concentration, said first dopant concentration [is] being higher than said second dopant concentration[;] , and said second zone [is] being formed between said first zone and said channel zone;

said channel zone of the first conductivity type being formed between said first connection zone and said second connection zone;

said insulation layer surrounding said at least one control electrode;

said at least one control electrode extending, adjacent to said channel zone, from said first connection zone to said second connection zone;

said semiconductor body defining a vertical direction and a lateral direction; and

said first connection zone, said second connection zone and said at least one control electrode extending in the vertical direction such that, when a voltage is applied between said first and second connection zones, a current path along the lateral direction is formed in the channel zone.

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Claim 5 (amended). [The] A semiconductor configuration  
[according to claim 1, wherein]: , comprising:

a semiconductor body including a first connection zone of a  
first conductivity type, a second connection zone of the first  
conductivity type, a channel zone of the first conductivity  
type, at least one control electrode, and an insulation layer,  
said first connection zone [has] having a first zone with a  
first dopant concentration and a second zone with a second  
dopant concentration[;] , and said second zone completely  
[surrounds] surrounding said first zone in the lateral  
direction;

said channel zone of the first conductivity type being formed  
between said first connection zone and said second connection  
zone;

said insulation layer surrounding said at least one control  
electrode;

said at least one control electrode extending, adjacent to  
said channel zone, from said first connection zone to said  
second connection zone;

said semiconductor body defining a vertical direction and a  
lateral direction; and



said first connection zone, said second connection zone and  
said at least one control electrode extending in the vertical  
direction such that, when a voltage is applied between said  
first and second connection zones, a current path along the  
lateral direction is formed in the channel zone.

Claim 6 (amended). [The] A semiconductor configuration  
[according to claim 1, wherein] , comprising:

a semiconductor body including a first connection zone of a  
first conductivity type, a second connection zone of the first  
conductivity type, a channel zone of the first conductivity  
type, at least one control electrode, and an insulation layer;

said channel zone of the first conductivity type being formed  
between said first connection zone and said second connection  
zone;

said insulation layer surrounding said at least one control  
electrode;

said at least one control electrode extending, adjacent to  
said channel zone, from said first connection zone to said  
second connection zone;

said semiconductor body defining a vertical direction and a lateral direction;

said first connection zone, said second connection zone and said at least one control electrode extending in the vertical direction such that, when a voltage is applied between said first and second connection zones, a current path along the lateral direction is formed in the channel zone;

said first connection zone [has] having a first zone with a first dopant concentration and a second zone with a second dopant concentration;

said second connection zone [has] having a third dopant concentration;

said channel zone [has] having a fourth dopant concentration;  
and

said fourth dopant concentration [is] being lower than said first and third dopant concentrations.

Claim 7 (amended). [The] A semiconductor configuration [according to claim 1, wherein] , comprising:



a semiconductor body including a first connection zone of a first conductivity type, a second connection zone of the first conductivity type, a channel zone of the first conductivity type, at least one control electrode, and an insulation layer;

said channel zone of the first conductivity type being formed between said first connection zone and said second connection zone;

said insulation layer surrounding said at least one control electrode;

said at least one control electrode extending, adjacent to said channel zone, from said first connection zone to said second connection zone;

said semiconductor body defining a vertical direction and a lateral direction;

said first connection zone, said second connection zone and said at least one control electrode extending in the vertical direction such that, when a voltage is applied between said first and second connection zones, a current path along the lateral direction is formed in the channel zone;

said semiconductor body [has] having a rear side;

a layer of the first conductivity type [is] being disposed at said rear side;

said first connection zone [has] having a first zone with a first dopant concentration and a second zone with a second dopant concentration;

said layer [has] having a third dopant concentration;

said third dopant concentration substantially [corresponds] corresponding to said first dopant concentration; and

said layer [is] being connected to said first connection zone.

Claim 8 (amended). [The] A semiconductor configuration [according to claim 1, including] , comprising:

a semiconductor body including a first connection zone of a first conductivity type, a second connection zone of the first conductivity type, a channel zone of the first conductivity type, at least one control electrode, an insulation layer, a further first connection zone[;] , and a further channel zone extending between said further first connection zone and said second connection zone; [and]

said channel zone of the first conductivity type being formed  
between said first connection zone and said second connection  
zone;

said insulation layer surrounding said at least one control  
electrode;

said at least one control electrode extending, adjacent to  
said channel zone, from said first connection zone to said  
second connection zone;

said semiconductor body defining a vertical direction and a  
lateral direction;

said first connection zone, said second connection zone and  
said at least one control electrode extending in the vertical  
direction such that, when a voltage is applied between said  
first and second connection zones, a current path along the  
lateral direction is formed in the channel zone; and

said at least one control electrode extending, adjacent to  
said second connection zone, said channel zone and said  
further channel zone, from said first connection zone to said  
further first connection zone.



Claim 9 (amended). [The] A semiconductor configuration  
[according to claim 1, wherein] , comprising:

a semiconductor body including a first connection zone of a  
first conductivity type, a second connection zone of the first  
conductivity type, a channel zone of the first conductivity  
type, at least one control electrode, and an insulation layer;

said channel zone of the first conductivity type being formed  
between said first connection zone and said second connection  
zone;

said insulation layer surrounding said at least one control  
electrode;

said at least one control electrode extending, adjacent to  
said channel zone, from said first connection zone to said  
second connection zone;

said semiconductor body defining a vertical direction and a  
lateral direction;

said first connection zone, said second connection zone and  
said at least one control electrode extending in the vertical  
direction such that, when a voltage is applied between said



first and second connection zones, a current path along the lateral direction is formed in the channel zone;

said semiconductor body [has] having a front side and a rear side; and

said first connection zone [extends] extending, in the vertical direction, from said front side to said rear side of said semiconductor body.

Claim 10 (amended). [The] A semiconductor configuration [according to claim 1, wherein] , comprising:

a semiconductor body including a first connection zone of a first conductivity type, a second connection zone of the first conductivity type, a channel zone of the first conductivity type, at least one control electrode, and an insulation layer;

said channel zone of the first conductivity type being formed between said first connection zone and said second connection zone;

said insulation layer surrounding said at least one control electrode;



said at least one control electrode extending, adjacent to  
said channel zone, from said first connection zone to said  
second connection zone;

said semiconductor body defining a vertical direction and a  
lateral direction;

said first connection zone, said second connection zone and  
said at least one control electrode extending in the vertical  
direction such that, when a voltage is applied between said  
first and second connection zones, a current path along the  
lateral direction is formed in the channel zone; and

said semiconductor body [has] having a rear side; and

an electrically conductive layer [is] disposed on said rear  
side of said semiconductor body for making contact with said  
first connection zone.

Claim 11 (amended). [The] A semiconductor configuration  
[according to claim 1, including] , comprising:

a semiconductor body including a first connection zone of a  
first conductivity type, a second connection zone of the first  
conductivity type, a channel zone of the first conductivity  
type, at least one control electrode, an insulation layer, and

an electrically conductive zone introduced in said first connection zone for making contact with said first connection zone;

said channel zone of the first conductivity type being formed between said first connection zone and said second connection zone;

said insulation layer surrounding said at least one control electrode;

said at least one control electrode extending, adjacent to said channel zone, from said first connection zone to said second connection zone;

said semiconductor body defining a vertical direction and a lateral direction; and

said first connection zone, said second connection zone and said at least one control electrode extending in the vertical direction such that, when a voltage is applied between said first and second connection zones, a current path along the lateral direction is formed in the channel zone.

Claim 13 (amended). [The] A semiconductor configuration [according claim 1, including] , comprising:

a semiconductor body including a first connection zone of a first conductivity type, a second connection zone of the first conductivity type, a channel zone of the first conductivity type, at least one control electrode, an insulation layer, and an electrically conductive zone introduced in said second connection zone for making contact with said second connection zone;

said channel zone of the first conductivity type being formed between said first connection zone and said second connection zone;

said insulation layer surrounding said at least one control electrode;

said at least one control electrode extending, adjacent to said channel zone, from said first connection zone to said second connection zone;

said semiconductor body defining a vertical direction and a lateral direction; and

said first connection zone, said second connection zone and said at least one control electrode extending in the vertical direction such that, when a voltage is applied between said



first and second connection zones, a current path along the  
lateral direction is formed in the channel zone.

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